Geological Quarterly, 2013, **57** (4): 560
DOI: http://dx.doi.org/10.7306/gq.1135

Geologic history of Florida: major events that formed the Sunshine State.
Albert C. Hine

Florida recently gained an excellent summary of its geologic history which is comprehensive and, at the same time, readable – a true geological novel – written by Albert C. Hine. The prime target of the book is non-professionals, and thus every chapter ends up with the explanation of essential geological terms used,but it is very useful for professionals also. The convention applied by the author is that despite it being addressed to an American reader (which is only to be expected) it is very interesting for readers from any part of the world as the local events are presented in both regional and worldwide perspectives. References to the personal experience of the author, often reflecting his fieldwork in Florida and in adjacent areas (in particular in Cuba), are additional attributes increasing the attractiveness of the book.

The story of Florida is outlined in ten chapters. It begins some 700 million years ago when Florida's basement rocks migrated 12,600 kilometres from their location at the South Pole, and then they were buried beneath a 3-kilometre-thick carbonate platform known as the Florida Platform that started to form in Late Jurassic. It was part of a larger structure (the Yucatan–Florida–Bahama carbonate platform) that covered the passive margin. In the Early to mid-Cretaceous, the western portion of the Florida Platform was significantly changed due to an environmental crisis that caused the drowning of the West Florida margin and development of the West Florida escarpment – a vertical underwater cliff reaching 2 km from top to bottom. Subsequently, at ca. 56 to 45 Ma, the Florida Platform collided with Cuba.

Florida is famous for its surface and subsurface karst, characteristic for a carbonate platform, and its beautiful sandy, siliciclastic beaches. The influx of sandy material of Appalachian provenance on to the Florida Platform started at ca. 30 Ma, in the coastal longshore system, and the last part of this influx occurred in the Pliocene. In the meantime, during the Miocene, deposition of phosphate-rich sediments occurred, and today Florida produces 30% of the world's phosphate. The final switch to carbonate deposition occurred at between 3 and 0.37 Ma when modern south Florida with its coral reefs was founded. But "geology never stands still", as A.C. Hine wrote, and now we experience the collective activity of human civilization that nowadays is the most significant recent geologic agent.

The outline of those major geological events is elegantly connected with the subtle features of the modern Florida landscape, and in this respect it is an outstanding example of a geological novel. As its motto, the words "The more you understand, the more you see", said by one noted Cuban geologist to Florida students who visited western Cuba (once part of the Yucatan portion of the Yucatan–Florida–Bahama Platform), seem to be most appropriate. Thus, even if the geological framework of Florida may be very unfamiliar for most readers of the book, they may learn, and profit, a good deal. I certainly did.

I hope that the first issue of the book is not the last one, and that in the next editions some editorial problems will be eliminated. For example, parts A and B of Figures 5.1, 7.5, 8.5, 9.11 and 9.12 should be printed on the same page; the captions of Fig.6.3B and 6.3C correspond to the content of Fig.6.3C and 6.3B; in Fig. 7.2B the scale is in feet; in the scale of Fig. 7.5B miles should be replaced by kilometres and *vice versa*; in Fig.8.4 the grains are approximately 0.1 mm, maximum 0.2 mm, and not approximately 0.25 mm as the explanation says. Fig. 4.2 does not show the global sea level curve (as p. 53 says); and Fig. 10.9B is definitely too dark.

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